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REMARKS

Claims 1 to 23 are pending. No claims are allowed.
Claims 5, 6 and 18 are cancelled.

1. The description is objected to because of various informalities on pages 6 and 7. Appropriate correction has been made.

2. Claim 4 is objected to based on an informality.
Appropriate amendment has been made.

3. Claims 8 and 23 are rejected under 35 USC 112, second paragraph. The aspect of the applicants' invention calling for the first and second electrode active materials being within a "specified weight" has been amended to "a desired weight".

Reconsideration of this rejection is requested.

4. Claims 1, 7 and 12 are rejected under 35 USC 102(e) as being anticipated by Lessar et al. (U.S. Patent No. 6,006,133). Lessar et al. describe an implantable medical device powered by a flat electrolytic capacitor. As described at column 8, line 59 to column 9, line 17, one embodiment of the capacitor comprises at least one anode layer in an anode sub-assembly having a registration tab extending from a perimeter thereof; at least one cathode layer having a registration tab extending from a perimeter thereof; and registration tabs for connecting anode sub-assemblies or cathode layers in parallel electrically. In that respect, the applicants' are of the

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opinion that the anode and cathode layers having "registration tabs" extending from their perimeters is for the purpose of correct alignment or proper relative positioning. This is bolstered by the further teachings in Lessar et al. at column 29, line 28+ where an inventive method is discussed for "assuring consistent registration of separator layers 165 and 180, anode sub-assemblies 170 and cathode layers 175 in electrode assembly 225; [and] stacking the various elements of electrode assembly 225 using robotic assembly techniques."

Furthermore, at column 30, line 6+, another method for assuring registration of separator layers 165 and 180, anode sub-assembly 170 and cathode layer 175 in electrode assembly 225 is described. In this method "alignment elements disposed within the stacking fixture are employed in a manual process which utilizes fixture registration points."

Instead of the applicants' claimed invention being directed to registration structure for correct alignment or proper relative positioning, it is for the purpose of creating a written or otherwise permanent record containing regular entries of unique details regarding a particular electrochemical cell. In that light, independent claims 1, 7 and 12 have been amended to set forth that the tab of the current collector is provided with a unique identification code. As described at page 7, lines 23 to page 8, line 3, the "unique identification code or ID matrix" is preferably etched by a laser and is for the purpose of regulating the manufacturing process for an electrode by recording the weight of various electrode components including the current collector and the active material contacted thereto for a particular

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electrochemical cell. At page 12, lines 23 to 28, one exemplary form of the ID matrix is described as including a cell model number and a unique serial number.

Clearly, the claimed identification code serves a markedly different purpose than the registration tabs of the Lessar et al. patent. Simply, registration for positioning purposes is not the same as recording unique information related to weights and materials of construction for an electrode. For that reason, amended independent claims 1, 7 and 12 are neither anticipated by the cited patent reference nor are they obvious in light of its teachings.

Reconsideration of this rejection is requested.

5. Claims 9 to 12, 15, 16 and 19 are rejected under 35 USC 103(a) as being unpatentable over Lessar et al. in view of Gan et al. (U.S. Patent No. 6,790,561). Gan et al. relates to an electrode of the configuration: SVO/current collector/CF_x/current collector/SVO. Nonetheless, this secondary reference still lacks recognition that it is useful in a cell construction to provide a current collector for an electrode with a unique identification code. As discussed in section 4 above, the identification code or ID matrix identifier is for the purpose of creating a written or otherwise permanent record containing unique details of the electrode's construction. Such details could relate, for example, to the weight of the current collector and the active materials. This is not discussed in either of the cited patents.

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In that respect, claims 9 to 12 are believed to be patentable as hinging from amended independent claim 1, which has already been discussed as being allowable in light of Lessar et al. Gan et al. does not change this. Independent claims 13 and 16 have been amended in a similar manner as independent claim 1. Therefore, they are also believed to be allowable in light of the combination of Lessar et al. and Gan et al. Claims 15 and 19 are patentable as hinging from allowable base claims.

Reconsideration of this rejection is requested.

6. Claims 2 to 6, 14, 17, 18 and 20 to 22 are rejected under 35 USC 103(a) as being unpatentable over Lessar et al. and Gan et al. in view of Merlin et al. (U.S. Patent No. 5,552,574). Merlin et al. relates to a method for marking a connector of a chip card with a laser. As described at column 2, lines 39 to 47, the marks on the card can include a trade mark or the manufacturer's company name or identification designed to prevent an act of falsification. In that latter case, the Merlin et al. "invention provides for: recognizing identification particulars memorized in said chip; marking said identification particulars on the connector; [and] marking the identification particulars also on the card." (Emphasis added.) As described in the abstract of the prior art patent, applications for this marking technique include chip cards, bank cards, telephone cards, etc.

Merlin et al.'s invention is further discussed at column 4, lines 11 to 24 with respect to Fig. 6. There, it is described that "it is possible, by means of sensors 71, 72, to

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recognize identification particulars to be marked that are recorded electrically in the chip 16 and to transmit them to the microprocessor 60 which, apart from the modulation of the laser L, controls the means 80 for the sweeping of the laser beam 30 along x and y as a function of the particulars received. These identification elements may thus be etched on the metal contacts 12 of the micromodule 10 as well as on the very body of the card 1, thus forming a security means by which the interchanging of the micromodule 10 and the card 1 can be avoided." (Emphasis added.)

It is the applicants' position that the use of a unique identification code provided in a metal surface, by laser or otherwise, is not necessarily novel in and of itself. However, what is novel is its use in an electrochemical cell. This is particularly the case for cells that are intended for use as power sources for implantable medical devices. For example, should something abnormal occur during device functioning, such as with the cell's discharge characteristics, it would be beneficial to analyze the cell for its manufacturing parameters. Further, in an electrode with disparate active materials on opposite sides of a current collector, it is important that the active materials are within a desired weight range for a cell designed to provide a desired discharge profile. This is the type of physical characteristic information that is encoded in the ID matrix. Once etched on the current collector, the applicants' unique identification code enables an end user to read the code and determine with a high degree of certainty what the discharge profile or other identification parameter was intended to be.

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In other words, the claimed identification code is not necessarily of information that had previously been encoded into a computer chip. This means there is no first "recognizing identification particulars memorized in [a] chip" then "marking said identification particulars on the connector". Instead, the presently claimed identification code is a record of certain physical parameters that are unique at the time of a cell's construction.

In that respect, the Merlin et al. patent teaches merely re-writing information that had previously been recorded in their chip 16. This is done by the sensors 71, 72 that then transmit the chip data to a micro-processor controlling the laser L that etches the metal contact 12. In that manner, the applicants' claimed invention is upstream from that of Merlin et al.'s; it is essentially at the stage where the information is being encoded in the chip, presumably by a computer program controlled controller. In the presently claimed invention, instead of a computer controlled controller, encoding is done by a laser etching the current collector.

Accordingly, amended independent claims 1, 13 and 16 are believed to be allowable in light of this combination of patent references. One skilled in the art at the time of the applicants' invention having read Merlin et al. in light of the Lessar et al. and Gan et al. patents would not have understood that it was beneficial to mark a portion of a cell's current collector, such as its extending tab, with information unique to the particular cell construction for later retrieval and use. Claims 2 to 6, 14, 17, 18 and 20 to 22 are patentable as hinging from allowable base claims.


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Reconsideration of this rejection is requested.

It is believed that claims 1 to 4, 7 to 17 and 18 to 23 are now in condition for allowance. Notice of Allowance is requested.

Respectfully Submitted,



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